

Attorney Docket No. 42390P11370

**PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Ohfuji et al.

Group Art Unit: Not Yet Assigned

Application No.: Not Yet Assigned

Examiner: Not Yet Assigned

Filed: Concurrently Herewith

For: POST EXPOSURE MODIFICATION OF
CRITICAL DIMENSIONS IN MASK
FABRICATION

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INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form PTO-1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form PTO-1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

FIRST CLASS CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Assistant Commissioner for Patents, Washington, D. C. 20231 on.

September 26, 2001

(Date of Deposit)

Krista Mathieson

(Typed or printed name of person mailing correspondence)

Krista Mathieson
(Signature of person mailing correspondence)

Docket No.: 42390P11370

Express Mail Label No.: EL 750127768 US

The Information Disclosure Statement is being filed:

- ☒ (a) within three months of the filing date of the patent application, (b) within three months of the date of entry into the national stage as set forth in 37 C.F.R. § 1.491 of the international application, or (c) before the mailing date of a first Office Action on the merits.
- ☐ **after** (a), (b), or (c) above, but before the mailing date of a final action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, and includes:
- ☐ the fee of \$180 set forth in 37 C.F.R. § 1.17(p) (see "Fees" below).
- ☐ **after** the mailing date of a final action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, and includes the Certification under 37 C.F.R. § 1.97(e) (see "Certification" below), a Petition requesting consideration of the Information Disclosure Statement (see "Petition" below), and the Petition Fee set forth in 37 C.F.R. § 1.17(i) (see "Fees" below).

Copies Of The References

- ☒ Copies of all references listed on the enclosed Form PTO-1449 are enclosed herewith. Attached to each reference not in the English language is a concise explanation of the relevance pursuant to 37 C.F.R. § 1.98(a)(3).
- ☐ A copy of the foreign search report is enclosed herewith.
- ☐ Certain references listed on the enclosed Form PTO-1449 were previously identified in the parent application of the present application, and copies of the references were furnished at that time. Accordingly, additional copies of the references are not submitted herewith, so as not to burden the file with duplicate copies of references. The Examiner is respectfully requested to carefully review the references in accordance with the requirements set out in the Manual of Patent Examining Procedure. In accordance with 37 C.F.R. § 1.98(d), the details of the parent application(s) relied upon for an earlier filing date under 35 U.S.C. § 120 in which copies of the references were previously furnished are set out below:

U.S. APPLICATIONS		Status (<i>check one</i>)		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1.				
2				
3.				

Other Applications

☐ The Examiner's attention is directed to the following U.S. patent application(s):

U.S. APPLICATIONS		Status (<i>check one</i>)		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED

Fees

- ☒ No fee is owed by the applicant(s).
☐ The IDS Fee of \$180.00 under 37 C.F.R. § 1.17(p) is enclosed herewith.

Method Of Payment Of Fees

- ☐ Attached is a check in the amount of \$ 180.00.
☐ Charge Deposit Account No. 02-2666 in the amount of \$. (A duplicate copy of this communication is enclosed for that purpose.)

Authorization To Charge Additional Fees

- ☒ If any additional fees are owed in connection with this communication, please charge Deposit Account No. 02-2666. (A duplicate copy of this communication is enclosed for that purpose.)

Instructions As To Overpayment

- ☒ Credit Account No. 02-2666.
☐ Refund

Date: _____

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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US Department of Commerce Patent and Trademark Office Form PTO-1449 (Modified)		Atty. Docket No.: 42390P11370		Application No.: Not Yet Assigned		
		Applicant: Ohfuji et al.		09-965280 09/965280 1c903 U.S. PTO 09/26/01		
		Filing Date: Concurrently Herewith				
US Patent Documents						
Examiner's Initials	Date	Document Number	Name	Class	Sub- Class	Filing Date
	01/02/01	6,169,274 B1	Kulp			03/01/99
	03/07/00	6,034,771	Rangarajan et al.			11/04/98
	08/08/00	6,100,012	Shi			07/06/98
	08/08/00	6,100,506	Colelli, Jr. et al.			07/26/99
	05/22/01	6,235,439 B1	Whiting			05/19/99
Foreign Patent Documents						
Examiner's Initials	Date	Document Number	Country	Class	Sub- Class	Translation
Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)						
		Section 2.7 Resists, SPIE Handbook of Microlithography, Micromachining and Microfabrication, Volume 1: Microlithography. [online] [retrieved on 8-3-01] Retrieved from the Internet <URL: http://www.cnf.cornell.edu/SPIEBook/spie7.htm Pgs. 1-11				
		Negative e-beam resist SAL603-0.45 [online] [retrieved on 8-3-01] Retrieved from the Internet: <URL: http://www.nanophys.kth.se/nanophys/facilities/nfl/resists/sal603.html Pages 1-3.				
		Alexei L. Bogdanov, Use of SU-8 Negative Photoresist for Optical Mask Manufacturing MAX-Lab, University of Lund, SE-221 00, Lund Sweden. [online] Pages 1-11. http://www.maxlab.luy.se/beamlines/bld811 .				
		R.D. Allen, G.M. Wallraff, D.C. Hofer and R.R. Kunz; "Photoresists for 193-nm Lithography", IBM Journal of Research and Development, Vol. 41, No. 1/2 -Optical lithography. [online] [retrieved on 6-27-01] Retrieved from the Internet: <URL: www.research.ibm.com/journal/rd/411/allen.html Pages 1-10				
		SPIE Volume 2512; Masumi Arai, Hiroyuki Inomata, Toshiharu Nishimura, Masa-aki Kurihara and Naoya Hayashi; "Application of Chemically Amplified Resists to Photomask Fabrication". Micro Products Research Laboratory, Micro Products Division, Dai Nippon Printing CO., Ltd., Japan. Pages 74-87				
Examiner			Date Considered			

Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw a line through the citation if not in conformance and not considered. Include a copy of this form with the next communication to the applicant

US Department of Commerce Patent and Trademark Office Form PTO-1449 (Modified)		Atty. Docket No.: 42390P11370		Application No.: Not Yet Assigned	
		Applicant: Ohfuji et al.		09-965280	
		Filing Date: Concurrently Herewith			

#2

US Patent Documents							
Examiner's Initials	Date	Document Number	Name	Class	Sub-Class	Filing Date	

Foreign Patent Documents							
Examiner's Initials	Date	Document Number	Country	Class	Sub-Class	Translation	

Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)		
		SPIE Volume 1086, Advances In Resists Technology and Processing.(1989) Deep UV ANR Photoresists For 248 nm Excimer Laser Photolithography. James W. Thackeray, George W. Orsula, Edward K. Pavelchek, Dianne Canistro; Shipley Co., Inc., Newton Massachusetts. Leonard E. Bogan Jr., Amanda K. Berry, Karen A. Graziano; Rohm and Hass Co., Inc. Philidelphia Pennsylvania. Pages 34-47.
		SPIE Volume 2793; A Chemically Amplified Resist Process For 0.25 u M Generation Photomasks; Mikio Katsumata, Hiroichi Kawahira, Minoru Sugara and Satoru Nozawa. MOS LSI Division, Semiconductor Company, Sony Corporation, Japan. Pages 96-104

Examiner	Date Considered

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